contained varying quantities of albumin, large numbers of granular and hyalin casts, and averaged thirty ounces a day. There was edema of the lower extremities. After operation, which was done under spinal cocainization, the albumin and casts disappeared, and the amount of urine increased to fifty ounces per day. I had intended to decapsulate the other kidney, but the patient declined, because she felt so well. I believe that the benefit in this case, as in a large number which have been reported, was due to the rest in bed, dieting and hygiene, because shortly after leaving the hospital the edema and albumin returned, and she sought other medical advice.

A study of the pathology of chronic nephritis explains the manner in which operative measures may produce temporary relief in some cases. The patients in whom we may look for benefit are those whose kidneys are congested, where the disease process is focal in character, or where the pressure produced by the disease prevents the functionating portion of the kidney from acting. It has been shown in cases in which the kidneys are soft and friable, where there is no congestion, where the capsule is not tense, that no benefit will result from *any* operative procedure.

How do operative measures relieve chronic nephritis? Edebohls tells us that it is due to the establishment of collateral circulation. This has been positively disproved, not only by animal experimentation, but by the examination of several hundred sections of human kidneys, in two cases of which the organs had been removed some time after their decapsulation for chronic nephritis. My belief is that benefit is obtained simply by relieving pressure and producing drainage. Simple incision of the capsule, or even nephropexy, if the kidney is movable, will relieve the venous tension, and by allowing freer return of the venous blood, internal pressure on the still functionating portions of the kidney is lessened and a temporary improvement takes place. The obstructed tubules are washed out, the amount of urine increases, the albumin decreases, and the excretion of urea may approach or even exceed normal. The beneficial results in true chronic nephritis can only be temporary, because it has been proven that within a comparatively short period a new and thickened capsule is reproduced which will certainly cause a return of all the previous symptoms. Furthermore, we must consider that in all cases of chronic nephritis we have, besides the kidney lesion, grave changes in the blood which tend to augment the already existing renal disease. Kidneys which have not yet undergone degenerative change may, by a timely operation, resume their normal function; but we cannot conceive of the restoration of function of glomeruli or tubules that have been obliterated by disease; nor can we expect to find tissues that have undergone fatty degeneration resume their original form.

Where arterio-sclerosis and consequent hypertrophy of the left ventricle exist, operative measures cannot stem the progress of the disease, nor renew the rapidly expiring lease of life.

With regard to the choice of operation, I believe that decapsulation alone or combined with incision of the kidney will meet any indication calling for surgical relief in chronic nephritis, except in cases of movable kidney, where it is necessary to anchor the organ by any of the recognized methods. It is well to remember that the amount of albumin, or of urea excreted, or the number of casts present in the urine of a patient does not always indicate the amount of destructive change which has taken place in the kidneys. The time factor plays an important part in this connection, and it is important to determine as near as possible the length of time that the disease has existed. The more recent the disease the better the prospect of improvement.

The operative technic is not very difficult, but requires liberal incisions in order to operate rapidly, as patients with chronic renal disease do not bear long operations well. If the condition of the patient permits, it is better to operate on both kidneys at one time, two operators working simultaneously.

Spinal analgesia should be employed in the majority of cases, owing to the danger of administering a general anesthetic. The incision should be made from the lower border of the last rib to the crest of the ilium, and the kidney delivered; the capsule is then incised from top to bottom and torn from the kidney. In contracted kidneys it will be advisable to incise the kidney directly through into the pelvis, being careful to make the incision about a quarter of an inch behind the median groove. This incision passes through very few large vessels, but should be packed with gauze to prevent too free oozing at first. If the kidney has been movable the capsule should be used to anchor it in position by sewing it to the lumbar fascia. In cases where it is difficult to deliver the kidney as a whole, we can deliver the upper pole first, and, after splitting the capsule transversely, decapsulate; the kidney is then returned and the lower pole delivered and decapsulated. The complete excision of the capsule as practiced by a number of French surgeons offers absolutely no advantage over its retention, and in cases of movable kidney is rather a disadvantage.

From a careful review of the literature on the subject I have formulated the following conclusions:

Surgical measures do not cure chronic nephritis of any variety. Temporary relief may be obtained in some cases by decapsulation and incision of the kidney.

The cases in which relief is most marked are those in which pain in the kidney is a prominent symptom.

To obtain the best results in chronic nephritis, the wound should be left open after decapsulation and incision.

No relief can be expected when extensive destructive changes have taken place in the kidneys.

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Improper Use of Wood Alcohol.

Reports are rife that wood alcohol is being used by unscrupulous pharmacists in the manufacture of flavoring extracts, tinctures of iodin and arnica, and spirits of camphor. Six samples each of tincture of arnica and spirits of camphor were examined for wood alcohol as well as for iodin content. As for iodin, they were uniformly good, but two of the samples contained only the methyl spirit as a solvent. —J. O. Schlotterbeck, in *Druggists' Circular.*